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THE MASTERS DEGREE AND TEACHERS' SALARIES.
BURBANK UNIFIED SCHOOL DISTRICT, CALIF.
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TO DETERMINE WHETHER A MASTER'S DEGREE SHOULD BE REQUIRED OF TEACHERS IN A PROPOSED NEW BURBANK SCHOOL DISTRICT SALARY CLASS, 3 QUESTIONS WERE INVESTIGATED (1) DOES THE ACQUISITION OF A MASTER'S MAKE FOR GREATER IMPROVEMENT IN TEACHING THAN AN EQUAL AMOUNT OF UNIVERSITY TRAINING IN OTHER AREAS, (2) DOES THE MASTER'S DEGREE PROGRAM OR THE SCREENING PROCESS REQUIRED FOR ADMISSION TO THE PROGRAM RESULT IN MORE EFFECTIVE TEACHING, AND (3) DOES THE MASTER'S DEGREE REQUIREMENT IMPOSE A DISCRIMINATORY RESTRICTION ON CERTAIN TEACHERS, UNDER THE PRESENT CERTIFICATION REQUIREMENTS. FIVE AREAS OF INQUIRY WERE UNDERTAKEN--(A) A REVIEW OF THE LITERATURE, (B) THE PROFESSIONAL OPINION OF 33 QUALIFIED PERSONS, (C) A REVIEW OF THE RATINGS GIVEN TEACHERS IN THE DISTRICT WHO HAD A MASTER'S AND THOSE WITH EQUAL TRAINING WITHOUT THE DEGREE, (D) A SURVEY OF "COMMON PRACTICES" AMONG 21 COMPARABLE SCHOOL DISTRICTS AND (E) AN INQUIRY OF TEACHER TRAINING INSTITUTIONS ABOUT REQUIREMENTS FOR THE DEGREE. LITTLE EMPIRICAL EVIDENCE IN FAVOR OF A MASTER'S DEGREE REQUIREMENT WAS FOUND. EXPERT OPINION TENDS TO BE AGAINST IT, ALTHOUGH ALMOST ALL DISTRICTS REQUIRE IT AT SOME POINT IN THEIR SALARY SCHEDULE. (RP)

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BURBANK UNIFIED SCHOOL DISTRICT
Burbank, California
DEPARTMENT OF RESEARCH
July, 1965

THE MASTERS DEGREE AND TEACHERS' SALARIES

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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APPRECIATION

The Burbank Unified School District wishes to express its appreciation to the thirty-three persons who took thought and time to express their personal opinions relative to the problem of this report. The strong response by this group of professional people speaks highly of the degree of responsibility and dedication they have to Education.

Thank You

Research No. 65-111
July 28, 1965

BURBANK UNIFIED SCHOOL DISTRICT
Burbank, California
DEPARTMENT OF RESEARCH

THE MASTERS DEGREE AND TEACHERS' SALARIES

The problem dealt with in this report arose out of discussion with the Burbank Teachers Association regarding the inclusion of the Masters Degree as a requirement in a proposed new salary Class, which would require 42 units of collegiate work. The discussion made clear the fact that arguments presented on both sides, the inclusion or exclusion of the M.A. Degree, were primarily ones of opinions, and were not based upon any data. As a result, it was agreed that the Research Department of this District attempt to determine what knowledge existed which might lead to a correct decision which would be in the best interest of education in Burbank. Specifically, the questions to be investigated were:

1. Does the acquisition of a Masters Degree make for more improved teaching than an equal amount of university training in other areas?
   a. Is there a difference between elementary and secondary teachers with regard to Question 1?
2. Is any apparent superiority in teaching the result of the Masters Degree program, or of the "screening" process required for admission to the program?
3. Does the requirement of a Masters Degree as a part of the salary schedule impose a discriminatory restriction on certain teachers, under the present certification requirements?

Procedure:

The Research Department outlined five areas of inquiry, and presented these to representatives of the Salary Committee of the Burbank Teachers Association. These five areas, which constitute the body of this report, were as follows:

1. A review of the literature dealing with the topic
2. An inquiry to fifty qualified persons in the fields of school administration and research, asking for:
   a. Any known empirical data dealing with the topic
   b. Their professional opinion with regard to the desirability of the Masters Degree requirement

3. A review of the ratings given Burbank teachers who had an M.A. and those with equal training, without the Degree

4. An inquiry of California teacher training institutions dealing with the requirements for the degree, as related to the new five-year teacher training requirements

5. A survey of "common practice" amongst the agreed upon twenty-one comparable districts

Literature:

The majority of students of education, who will be named in the section headed "Expert Opinion," state that they know of no empirical data relative to the specific problem of this report. Yet from a few have come references to fragments of information which are known.

This is not to say that educational research has not concerned itself with the general area; it most certainly has. Morsh and Wilder compiled a large annotated bibliography of studies in the area of teacher effectiveness for the period 1900-1952. A.S. Barr reports on 86 studies conducted between 1952 and 1955. N.L. Gage, Stanford University, has compiled an entire volume on research related to teaching. Why, then, are answers not available for our question?

In general, all of these studies have foundered, due to the apparent multiplicity and inter-relationships of factors which constitute "good teaching," let alone any attempt to trace these factors to their source in the training or experience of individuals. The first problem of such studies has been the definition of "good teaching." While David Ryans set up a constellation of characteristics of good teachers, even he would admit that this basic question has not been answered. While Ryans is optimistic and says the day of solution is near, N.L. Gage, speaking before the 1960 California Advisory Council on Educational Research, stated that after 50 years of fruitless research we had better devote our time to some research where the prospects of success are better.

What, then, are the fragments of data which may have relevance to our problem? Before stating these directly, it seems wise to quote the caution given in a letter to the writer by Arthur L. Benson, Director of Teacher Examinations for the Educational Testing Service. Dr. Benson writes:

> "Any research in this area is likely to have limited applicability for at least two reasons. First, the operational definition of "improved teaching" used as the criterion is likely to be unacceptable to many school districts, and, indeed, may be inappropriate for different teaching fields or levels. Second, the wide variations in Masters Degree programs, both with respect to content and standards, seem to preclude much generality for the outcome of these programs."

John C. Flanagan, writing in "Studies of the American High School," a part of the Project Talent study, makes the following statement:

> "Of special interest in connection with questions of salary scheduling are the positive correlations, ranging from .195 to .274, of the test scores with the number of teachers having the master's as the highest degree. There were also positive correlations, ranging from .171 to .249, with the number of teachers having graduate training in the subjects taught."

Writing the summary on Teacher Effectiveness for the Encyclopedia of Educational Research, David Ryans says that the following generalizations appear to be in order. (Quoted only in part.)

> "Measured intellectual ability, achievement in college courses, general cultural and special subject matter knowledge . . . appear to be characteristics of the teacher which are likely to be positively correlated with teacher effectiveness in the abstract."

M. M. Hall, University of Georgia, in studying the effectiveness of small schools, found that the percentage of teachers holding the Masters Degree was a strong factor in the quality of education. Similarly, but not necessarily related to the Masters as a requirement, Cresap, McCormick and Paget, in a study of education in Kentucky, state that there is a very positive correlation between the achievement of pupils in <u>their later success</u> and the level of preparation of teachers.

Also, Dr. Roy M. Hall, Dean of School of Education at the University of Delaware, summarizes a study of education in Florida by writing that

> "it is not the number of courses which teachers have but the type of preparation which makes the difference."

The NEA Research Department reports on a New York State study in which the basic criteria for dividing schools into "good" and "poor" groups were the expenditure per pupil and test measured achievement. This study reports that in the "good" schools' teaching staffs there were 53.5% who had the Masters Degree, as compared with 22.5% amongst the teaching staffs of the "poor" schools.

So that it will not appear to have been overlooked, mention is made of the Arkansas Teacher Improvement Program. No usable data relative to Masters Degree effectiveness is available, since the program encountered procedural difficulties.

One final citation is to the work of Elizabeth L. Dalton of George Peabody College for Teachers, reporting research under the title of "What Makes Effective Teachers for Young Adolescents." A quick summary of two conclusions, as interpreted by the NEA Research Department are:

> "Courses in methodology make more difference than courses in liberal arts as far as pupil reaction to teachers is concerned.
>
> "Although this research did not establish a significant difference between teachers with master's degrees and those with only bachelor's degrees, there is a clear indication that continued study is important, particularly within the fields of education and psychology."

Expert Opinion:

The following letter of request for assistance was sent to forty-nine persons or institutions working in the field of Teacher Education or Educational Research:

> "The Burbank Unified School District is considering the merits of inclusion or exclusion of the Masters Degree as a requirement at certain points in its teachers' salary schedule. You could be of considerable help to us in reaching a decision.
>
> Specifically, do you know of any experimental evidence which indicates that the acquisition of a Masters Degree makes for more improved teaching than does an equal amount of university training in an area of the teacher's choice?
>
> Is there a difference between elementary and secondary teachers in this regard?
>
> If improved teaching performance has been evidenced for those having the Masters, could it have resulted from the "screening" of candidates for the Masters program, which resulted in a select group?
>
> Even though you may not know of empirical evidence, we would greatly value your opinion."

Thirty-three persons responded to our request for assistance. These persons were:

Dr. Archie MacKinnon, Director of Research, Toronto Board of Education
Dr. Robert E. Bills, Assistant Dean for Research, University of Alabama
Dr. Edward A. Brainard, Dir. of Research, Jefferson Public Schools, Denver
Dr. Arvid Burke, Dir. of Studies, Research Division, New York Teachers Ass'n.
Dr. Henry Chauncey, President, Education Testing Service, Princeton
Dr. William Ellena, Assoc. Exec. Secretary, American Assoc. School Admin., Washington
Dr. Alvin C. Eurich, Vice-President, Fund for Advancement of Education, New York
Dr. Hugh M. Bell, Professor Psychology, Chico State College, Chico, California
Dr. John Flanagan, President, American Inst. for Research, Pittsburgh
Dr. Roy M. Hall, Dean School of Education, University of Delaware
Dr. Chester William Harris, Prof. of Education, University of Wisconsin
Dr. William Hedges, Director, Div. Education Research, University of Virginia
Dr. Harold Jeffery, Director Research, Seattle Public Schools
Dr. Robert Miner, Director Research, Ohio Educational Association, Columbus
Dr. Spencer Myers, Supt. Edina-Morningside Public Schools, Edina, Minnesota
Dr. LeRoy Peterson, Prof. of Education, University of Wisconsin
Dr. Ralph Purdy, Chairman, Dept. Education Admin. Miama University, Oxford, Ohio
Dr. Arthur Rice, Editor, The Nation's Schools, Chicago, Illinois
Dr. Robert Travers, Director Bureau Education Research, University of Utah
Dr. Elmer West, Dir. Office Statistical Info. & Research, American Council on Ed
Dr. J. Wayne Wrightstone, Assist. Supt. Bureau Educ. Research, New York City Schools
Dr. Harvey N. Dondero, Assist. Supt. Clark County Schools, Las Vegas
Dr. Sam Lambert, Director Research NEA, Washington, D. C.
Dr. Kenneth Brown, Director Special Placement, CTA, Burlingame, California
Dr. William Odell, Professor of Education, Stanford University
Dr. Carl Larson, Chief, Bureau Certification, State Department, Sacramento
Dr. George Ellis, Director of Research, San Diego City Schools
Dr. William Briscoe, Professor of Education, UCLA
Dr. John Michaelis, Professor, Berkeley University
Mr. Lester Steig, Salary Coordinator, San Francisco City Schools
Dr. David F. Stafford, Dir. of Research Pennsylvania State Educ. Ass'n, Harrisburg, Pa.
Dr. Meryl R. Baumer, Dir. of Research, Euclid Public Schools, Euclid, Ohio
Dr. Jules Nathanson, Dir. Research, Hartford Public Schools, Hartford, Connecticut

As any researcher knows, information in verbal form is quite difficult to handle. However, there certainly must be some validity to the collective expression of persons schooled and experienced in a field so that an effort must be made to present fairly such information. In this report the writer will present what is felt to be significant statements from the material, and then at the conclusion attempt a summary.

1. Bell, Hugh M. - Professor of Psychology, Chico State College
   Chico, California

> "My feeling is that the possession of a master's won't make much difference in teaching effectiveness unless a thesis is required. Of course, there is always the possibility that taking more courses may result in the teacher coming up against a teacher or a subject of study that will give him a new enthusiasm and direction for teaching, but this might occur in any graduate course regardless of whether or not it was taken for an advanced degree.
>
> "I think it will make a difference if a thesis is required for the master's. This gives a new focus to the student's graduate study and taps a different kind of ability than just taking more courses. I have seen students who could garner A grades in nearly all courses, but fail to complete a thesis because they had to do something on their own initiative. Carrying through a thesis project is a real test of the student's ability to select a topic, do the background reading, develop and test an hypothesis, and then state what has and has not been found.
>
> This kind of discipline often gives a teacher a new appreciation of the difficulties inherent in the accumulation of the knowledge which he dispenses to pupils."

2. Bills, Robert E. - Interim Dean, College of Education, University of Alabama

"Little objective information appears to be available to answer your questions. Instead, most of us have found it necessary to proceed on the basis of our own "considered" judgment and opinion. Two general factors appear to be of importance in answering questions such as the ones you pose.

"If the Master's Degree is tied into a salary schedule, this places certain restrictions on universities which, in effect, requires that they be the screening agency for merit salary increases. This is an obvious disadvantage in running a quality graduate program and may be a further disadvantage to the teacher in that there may not be as high a relationship between merit teaching and the accumulation of degrees as we would desire there to be.

"A second consideration is also important. In the absence of a planned program which leads eventually to a Master's Degree, teachers often take courses which are available to them at their convenience rather than courses which add up to a unified concept of a higher degree of education."

3. Brainard, Edward, Director of Research, Jefferson County School District, Lakewood, Colorado

"I know of no research which indicates the possession of a masters degree per se improves a teachers performance. Logic would appear to be on the side of improvement but this, of course, is not research evidence.

"This school district is working with a teachers committee to establish a program (alternate route) which allows the teacher to progress to the masters degree salary schedule without actually holding a masters degree. This program would allow teachers to take additional work, under graduate or in-service in lieu of establishing a former masters degree program. This project is doing completion of the various details and we are convinced will greatly improve education and allow teachers another route toward improvement of academic qualifications."

4. Bright, John H. - State Salary Coordinator, California Teachers Association, Burlingame, California

"There is no evidence that "screening" of candidates made for better teachers. In fact, some of the national publications indicate that the so-called screening in some institutions does not make much of an impact on anyone.

"In all fairness, I think we are all aware of the variety of requirements by colleges and universities regarding master's degrees. There is quite a movement in the U.S. to develop accreditation procedures for the advanced degrees, but this has never been enforced to a great extent.

"My personal opinion is that the master's degree does have a place in education, and I am not against incorporating such a requirement in a schedule. Where it is placed in the schedule can be quite an issue."

5. Briscoe, William S. - Professor of Education, University of California at Los Angeles

"I know of no "experimental evidence which indicates that the acquisition of a masters degree makes for more improved teaching than does an equal amount of University training in an area of a teacher's choice." In Oakland, some years ago, we found that "masters' equivalents" and "doctors' equivalents" wherein teachers or administrators proposed their own programs of study which were evaluated by a committee as being equivalent to a masters or a doctorate, seemed to bear no relation to the teachers' or administrators' subsequent ratings. It was the opinion of the evaluating committee, of which I was chairman, that the self directed program of study was usually less well planned than a directed program of study as in the case of the masters or doctorate; and that the ability level of the master and doctor equivalent candidates was below that of those who sought these degrees at a University. Also, it was observed over a period of years that those who sought equivalents seemed to be motivated more by money than those who sought regular degrees. . . .

"From personal experience over many years and in many situations both as a superintendent and as a professor, I conclude that equivalents are difficult to administer, as well as costly. . . .

"Personally, I am of the opinion that a high school teacher should have a masters in his major field. . . .

"Answers to the problems posed in the two paragraphs immediately preceding, it seems to me, might be found in closer relations between school systems and universities. Certainly a university is or ought to be vitally concerned with the extent to which its courses tend to improve teaching. . . .

"Yes, I think there is a difference between graduate training of elementary and secondary teachers. The work of elementary teachers should be oriented more to growth, development and learning problems. Secondary graduate work should be more specialized on subject areas, although for those who are to work with the culturally handicapped a combination of the elementary and secondary emphases would seem to be indicated.

"Naturally, each higher degree tends to screen the group finer; but whether such screening tends to select the better teachers has never been established."

6. Brown, Kenneth R. - Instructional Services Executive, California Teachers Association, Burlingame, California

"It seems to me that this question of degree recognition is heavily a prestige and psychological matter. If the degree programs were uniformily excellent, I think most teachers would accept their desirability. . . .

"Most likely - as a guess on my part - there is more resistance to the M.A. requirement among the elementary group. They see a very close immediate need for some direct guidance on classroom management - grouping for reading, methods for imparting math and reading or art and music lessons. Recall that commonly the elementary teacher has to plow many furrows, the secondary teacher only one or perhaps a few."

7. Chapman, James D. - Administrative Assistant for Research Edina-Morningside Schools, Edina, Minnesota

"Graduate education has been, and continues to be, geared to degrees.

"Requiring degrees has the advantage of making the college or university the evaluator of a professional program and performance in the program. . . .

"Since incorporating the degree requirement and the revised salary structure, we have found a substantial increase in advanced training taken by classroom teachers."

8. Dondero, Harvey N. - Assistant Superintendent, Clark County School District, Las Vegas, Nevada

"I am sure that improved teaching performance results from the screening of candidates for the Master's program, which in turn results in a select group."

9. Ellis, George M. - Director of Certificated Personnel, San Diego City Schools, San Diego, California

"We have made an extensive study of professional growth needs of teachers, using a sampling method to obtain representation from every "preparation" class on our salary schedule. We also included separate samples of curriculum specialists, principals, program directors, etc. The raw data stand six inches thick, so the study must be good.

"The basic research question we asked of persons in each sample was: "How would you improve requirements for our training classes in order to encourage a type of professional growth which would improve performance in a classroom?"

"There was considerable interaction and close examination by both administrators and teachers present in terms of district objectives, as well as personal objectives. . . .

It was rather interesting to note that there seemed to be a real schism between elementary and secondary teachers in regard to the value of the master's degree.

"Secondary teachers generally felt that the master's degree represented a standard in the subject area field and that its attainment in a subject area gave the teacher a deeper understanding and skill in the method of inquiry appropriate to the discipline concerned. Since the "discovery method" commonly used now in science, math, English, social studies, etc. calls for a stress on the method of inquiry, this factor was judged as being important.

"On the other hand, the elementary teachers felt that the masters degree was an unrealistic requirement, the attainment of which ordinarily would not contribute materially to their performance in the classroom. .

"I think sooner or later we must get to the point that a teacher is not just a teacher. His teaching job should have its own job description and job qualifications. What the school district wants is the best possible performance in that classroom--not the academic degree per se. . . .

"I might note that the Los Angeles system, in where there is no master's barrier, can result in severe financial problems. After all, the master's degree is a more difficult and rigorous imposition than many teachers want to assume. I would think that districts abandoning it would have to be prepared to assume the financial responsibility that such a change would result in. However, we must not forget that probably a tremendous amount of turnover occurs in elementary school ranks."

10. Eurich, Alvin C. - President, Aspen Institute for Humanistic Studies
Aspen, Colorado

"I do not know of any experimental evidence which indicates the acquisition of a Masters Degree makes for more improved teaching than does an equal amount of university training in an area of the teacher's choice. In fact, I know of no technique that has been developed which measures teaching ability. Consequently, it would be difficult to get experimental evidence. . . .

"I deplore one aspect of the general practice to provide higher salary for people with Masters Degrees. It encourages college graduates who have had an over-abundance of courses in education to go on with additional courses in education because they are not qualified to take graduate courses in a subject matter field. In my view, the additional courses over and above the large number they have already had are not likely to make them better subject matter teachers."

11. Hall, Roy M. - Dean, School of Education, University of Delaware
Newark, Delaware

"Those who do receive the masters degree tend to be more academically oriented, while those who simply accumulate courses in general are of low scholarship. It seems reasonable, therefore, to assume that screening for the masters degree would yield a higher type scholar and consequently more effective teachers."

12. Hedges, William D. - Division of Educational Research, University of Virginia, Charlottesville, Virginia

"Assuming the teacher has access to good guidance I would personally prefer she be able to elect courses of her own choice and that she be given recognition for this equal to the equivalent hours toward the Masters. For transient teachers this might pose a problem in other systems which would not recognize the situation but I must admire the system which doesn't worry too much about the "degree." Thus, I can see the tremendous value of travel for some teachers and would like to see this given credit (under certain conditions of course)."

13. Jeffery, Harold B. - Director of Research, Seattle Public Schools
Seattle, Washington

"Seattle followed the pattern of San Francisco in giving credit for advanced training rather than degrees until four years ago when a $200 bonus was granted to teachers anywhere on the salary schedule when they obtained their master's degree and $200 additional for attainment of a doctorate. For 1965-66 these amounts have been raised to $250 each.

"While it is difficult to measure any change in teaching performance as a result of attaining advanced degrees, it is an added prestige to the system which probably accounts for the fact that many school boards are willing to pay a bonus for them."

14. MacKinnon, A.R. - Dean of Education, Simon Fraser University, Vancouver, British Columbia, Canada

"I think you will agree that the establishment of criterion for "effective teaching" has baffled mose experimenters to date. What studies I have read on the questions have been open to serious scientific objection."

15. Michaelis, John U. - Professor of Education, University of California Berkeley, California

"I can imagine many situations in which a hand-tailored program of courses would be better for a teacher than the formal requirements for the M.A. Most M.A.'s are not designed specifically to improve teaching.

"My own opinion is that a school system might well give guidance and direction to teachers as they take credit courses where special direction fits in with the earning of a M.A. this would be fine. If it does not fit in with a M.A. degree, but it would help the teacher this also would be fine.

"Another way of putting it is that most teachers need direction and guidance. To be avoided is the shopping around for other course credits that help one get up the salary schedule whether or not they are helpful in improving teaching."

16. Miner, Robert E. - Director of Research, Ohio Education Association Columbus, Ohio

"We have, for a number of years, been urging boards of education to establish evaluative procedures which involve target setting by teachers. Among these targets we would hope that the teacher would select graduate course work which would be meaningful to them. At the same time, we have resisted attempts to require that a Masters Degree be taken in the "teacher's field." We believe there might be teachers aspirant to guidance positions, speech and hearing therapist positions, counseling positions, etc. which would be "out of their field," but the teacher's personality and background might logically be directed toward such graduate study."

17. Odell, William R. - Professor of Education, Stanford University, Stanford, California

"I have always felt that a more important thing for a school system to do however would be to work out a system of advancement along the salary schedule whereby each individual staff member's own needs for improvement constituted the basis for encouraging continuing study. This is much better than leaving the choice of training to the teacher. I think also that this plan is better than the wistful hope that a master's degree program necessarily provides a desirable unitary experience.

"With respect to the difference between the needs of elementary and secondary teachers I myself see no tremendous difference between the two although I know what you are implying. But the blind presumption that more content is good for all high school teachers has never been justified so far as I am concerned."

18. Purdy, Ralph D. - Chairman, Department of Educational Administration
Miami University, Oxford, Ohio

"Other things being equal (?) I would always take the teacher who possesses the Masters Degree. This gives evidence to me of content knowledge which should provide the basis for the development of competency in the classroom. It is impossible for candidates for the Baccalaureate Degree to acquire a satisfactory understanding of child development, how children learn, to have much more than fundamental content information, and to have developed the art of helping others become masters of content material during just the four year program. I think the basic understanding must be accomplished. Once this has been done, experience will provide the additional understandings upon which advanced work can be taken with insight and understanding essential for becoming a master teacher. This should culminate in the Masters Degree in an appropriate sequence program of both experience and theory which have been inter-related and integrated."

19. Rice, Arthur H. - Coordinator, Instructional Systems in Teacher Education, Indiana University, Bloomington, Indiana

"Your letter addressed to me at THE NATION S SCHOOLS (with whom I am still associated) was forwarded to me at Bloomington where I am directing a five-year experiment and research project in teacher education. This gave me an opportunity to present your question to my colleagues. All of them answered your first question with a positive "no." There is no undeniable evidence in answer to your first question. Likewise, my colleagues seem to agree that there is no difference between secondary and elementary teachers in this regard.

"Nevertheless, there is a logical basis for assuming that a sequence of learning carefully planned in terms of the total outcome for the person preparing for the profession may have more intrinsic value or collective value than one which might result from the haphazard selection of subject matter by the student.

"The assumption that improved teaching performance by those who have a master's degree would result from guided selection is rather thin. However, this same accusation might be made with regard to the preparation of an individual for any profession."

20. Robinson, Willian G. - Salary Consultant, Office of Professional Development & Welfare, N.E.A., Washington, D.C.

"As I have journeyed about the country this past year, I have been surprised on how many local districts still have a separate column for teachers who have the hours but do not possess a master's degree. In this age when everyone is having to work quite hard to keep their education from becoming obsolete, perhaps we should be encouraging our teachers to take needed work for retention of competency in their subject matter area regardless of whether or not this additional work eventually culminates with another degree."

21. Steig, L.R. - Salary Coordinator, San Francisco Unified School District
San Francisco, California

"The San Francisco Unified School District, at my recommendation, did not recognize any graduate degrees for salary classification purposes. The Board, at that time, (1946-47) felt that the advanced degree did not necessarily enhance the teacher's qualifications in a specific teaching field or division. The members felt that teachers should be free to select courses which would prepare them to become better teachers in their chosen fields."

22. Wakefield, Howard, Professor of Educational Administration, University of Wisconsin, Madison, Wisconsin

"You are really asking a much broader question. Are professional graduate schools (law, medicine, commerce, engineering, education, architecture, agriculture) obligated to "prove" the utility of their degree requirements? If so, within what period of time and to whom? In other words, should "consumers" decide the value and, if so, which group of them? . . .

"The degree also represents (or certainly should) a measure of competence in research - an attribute which is coming to be valued more highly in classroom teachers in the age we are entering. . . .

"Your problem is a political one - and in the face of the new militancy among teachers, your notions of what may be best to do with salary schedules or policies will have to stand more than the test of reason."

23. Wrightstone, J. Wayne - Acting Associate Superintendent, Board of Education of City of New York, New York

"In New York City, for example, the Masters Degree permits the teacher to obtain an increment of $400.00 in salary both at the elementary and at the secondary school level. The possession of a Doctorate Degree permits any teacher to obtain an additional increase of $400.00. This is true of many of the cities, especially the larger metropolitan areas. It is also a feature of the salary schedules of the suburban communities around New York City.

"I do not know of any scientific or experimental evidence which indicates that the acquisition of a Masters Degree inevitably makes for improved teaching compared with an equal amount of university training in an area of the teacher's choice. As a matter of fact, I am sure that the degree in some instances does not lead to improved teaching.

"It has been our observation over the years, however, that there is a "screening" factor which does lead many of the more competent teachers to pursue graduate study for the Masters Degree and also for the Doctorate Degree. This "screening" factor is largely self-motivation and the desire to improve one's professional ability. Because of these observations, we are committed in New York City to the policy of awarding a special increment to persons who possess the post-graduate degrees.

Summary of Section:

From the response of the persons replying, there appears to be only one area of real agreement; that is that there is no substantial empirical evidence that the holder of a Masters Degree is a more effective teacher. It is also generally agreed that there is little probability that such evidence will become available.

In the area of opinion as to the desirability of a Masters Degree for the development of effective teachers, there is a slight majority who take a negative position. Almost unanimously those who side with this majority opinion suggest a guided, planned program for teacher development on an individual basis.

Again in the area of opinion, the most popular conclusion is that there exists a screening process which tends to select persons having greater mental ability, more ability to organize and persevere, and that this tends, in general, to select a more capable group of teachers. Respondents appeared to be generally assuming that such a Masters Degree program does include a thesis.

Two interesting side comments, about the first of which there was divided opinion as to its desirability, were statements that the requiring of a Masters Degree made the college or university the judge of teacher training merit. The second comment made the very practical comment that in today's milieu the questions asked are not educational, but political.

Teacher Ratings:

The Masters Degree as a requirement for certain Classes of the salary schedule is comparatively recent in this District. At the time of its commencement as a requirement, a "grandfather" clause was granted to certain teachers. In 1964-65 there were 45 teachers eligible under this clause to advance in Class without the M.A. Degree.

These 45 teachers who advanced on the salary schedule were matched with teachers who had the Masters Degree. The matching was done on the following bases:

1. The matched teachers taught at the same educational level, and, when such level was junior or senior high, they taught in the same subject field

2. The matched pairs taught in the same school, and, thereby, were rated by the same principal

3. The members of the matched pairs were within ten years of being equal in experience, and none had less that eleven total years of experience

4. The matched pairs were within ten units of equality in the total number of units acquired after the Bachelors Degree.

5. All teachers were on tenure

Out of the 45 "No Masters" group it was possible to match 33 with teachers having Masters Degrees who met the four criteria above. The data derived from this matching process is shown in the table below.

Comparison of "No Masters" and "Masters" Degree Teachers

Item	"No Masters" Degree	"Masters" Degree
Average number of units earned beyond B.A. Degree	73	78
Number of teachers exceeding unitary requirement for highest class by at least 3 units	11 of 33	21 of 33

Ratings by Principals*

Based upon 1 for Outstanding; 2 for Strong; 3 for Need Improvement (Smaller number is higher ranking)

Item	"No Masters" Degree	"Masters" Degree
Planning for Instruction	1.48	1.45
Classroom Control and Understanding of Children	1.55	1.48
Instructional Techniques	1.58	1.51
Knowledge of Subject Matter	1.36	1.24
Classroom Environment	1.76	1.61
Relationships with Adults	1.42	1.42
Professional Attitudes	1.24	1.09
Personal Qualities	1.51	1.33

* Rating principals were unaware of this study

From the above it may be observed that teachers holding the M.A. Degree are almost twice as apt to continue college or university work beyond the minimum requirements for the highest salary level.

It may be observed that in the ratings given by principals, each principal being unaware of this study and the same principal rating both members of each pair, that in seven of the eight categories the teachers with the M.A. Degrees averaged the better ratings. In the sixth category the scores were equal.

Since the scores in most ratings are close, it is correct to raise the question as to their significance. Applying Garretts Chi Square procedure of independence in contingency tables, the following results were found:

1. For any single category of the rating sheet, the differences reached no level of significance worthy of consideration; the item of greatest divergence being subject to chance 75 times out of 100.

2. For all categories of the evaluation as a whole, the probability of the difference being due to chance is 22 out of 100.

Degree Requirements

The response by California teacher training institutions as to Masters Degree requirements was exceedingly small. However, two colleges which do provide a considerable number of teachers to Burbank did respond.

The following letter was sent to a considerable number of teacher training institutions. The responses of those replying are shown after each question.

> The Burbank Unified School District is considering whether it should include or eliminate the Master of Arts Degree as a requirement in its teachers salary schedule. A portion of this consideration deals with the difficulty of obtaining this Degree under the new California five-year teacher training requirements.
>
> We would appreciate your response to the following questions:

1. What number of additional units would be required of a teacher who had pursued a course leading to elementary certification with a major of History, and who desired an M.A. Degree in History?

Long Beach State	0 to 30 Units
Los Angeles State	30 Units
San Fernando Valley State	30 Units
San Jose State	30 Units

1a. (Same teacher who desires an M.A. degree in Elementary Education)

Long Beach State	30 Undergraduate plus 30 graduate Units
Los Angeles State	30 Units
San Fernando Valley State	24 Units
San Jose State	15 Units

1b. (Same teacher who desires an M.A. degree in School Administration)

Long Beach State	39 Undergratuate plus 30 graduate Units
Los Angeles State	60 Units
San Fernando Valley State	25 Units
San Jose State	30 Units

2. What would be the additional requirements for a person who had obtained a Secondary teaching credential also with a major in History and who wished an M.A. in History?

Long Beach State	0 to 24 Units
Los Angeles State	30 Units
San Fernando Valley State	24 to 30 Units
San Jose State	30 Units

2a. (Same teacher who desires an M.A. in Elementary Education)

Long Beach State	39 Undergraduate plus 30 Graduate Units
Los Angeles State	30 Units
San Fernando Valley State	24 Units
San Jose State	12 Units

2b. (Same teacher desiring an M.A. in School Administration)

Long Beach State	30 Units
Los Angeles State	30 Units
San Fernando Valley State	25 Units
San Jose State	30 Units

3. Is your institution granting, or seriously contemplating granting, a Master of Teaching Degree at the completion of the five-year program?

Long Beach State	No
Los Angeles State	No
San Fernando Valley State	No
San Jose State	Yes

4. Has your institution developed programs leading to the Masters degree especially designed to take into account the effects of the new five-year training requirement?

Long Beach State	A few in elementary education
Los Angeles State	No - M.A. is 45 Units beyond B.A.
San Fernando Valley State	No reply
San Jose State	None being planned

Summary of Section

Only one thing is certain from the above data; the teacher seeking an M.A. Degree faces a confusing set of requirements.

For the purposes of this report, however, it appears that a teacher can obtain an M.A. Degree with thirty units beyond the Bachelors Degree, if he "shops around." Unit-wise the elementary teacher is not at a disadvantage when it comes to obtaining the Masters Degree, as compared to his secondary colleagues.

Common Practice in Comparable Districts

In a joint meeting of District administration and the Burbank Teachers Salary Committee held July 1, 1965, a list of twenty districts considered to be comparable to Burbank was agreed upon. These districts are used in the list below, with indication as to the point on their salary schedule where the Masters Degree becomes a requirement.

Alhambra	B.A. plus 60 Units with M.A.
Arcadia	B.A. plus 60 Units with M.A.
Burbank	B.A. plus 56 Units with M.A.
Culver City	B.A. plus 54 Units with M.A.
Downey	B.A. plus 60 Units with M.A.
Glendale	B.A. plus 56 Units with M.A.
Inglewood	B.A. plus 45 Units with M.A.
Long Beach	Between B.A. + 28 and M.A. + 28
Los Angeles	M.A. not required
Montebello	B.A. plus 60 Units with M.A.
Palos Verdes Peninsula	54 Units beyond B.A.
Pasadena	B.A. plus 54 Units with M.A.
Pomona	B.A. plus 45 Units with M.A.
Santa Monica	B.A. plus 70 Units with M.A.
Torrance	B.A. plus 56 Units with M.A.
Santa Ana	B.A. plus 60 Units with M.A.
Riverside	B.A. plus 60 Units with M.A.
Fontana	B.A. plus 48 Units with M.A.
San Bernardino	M.A. not required
San Diego	Between B.A. + 24 and B.A. + 48
Santa Barbara	B.A. plus 54 Units with M.A.

Section Summary

The foregoing material shows a variety of practices, with only Los Angeles and San Bernardino not requiring the M.A. Degree at some point in the schedule as a requirement. Los Angeles, however, (as well as Seattle) pays a bonus to those teachers who do secure an M.A. Degree.

An interesting variation involving a time limit for the earning of a Masters Degree is reported by the NEA from its survey of May, 1964.

Phoenix, Arizona
5% of total number of teachers may have B.A. Degree. M.A. required for tenure

Tucson, Arizona
M.A. required within four years for senior high teachers

Granite City, Illinois
M.A. required within ten years for junior and senior high school teachers

Baltimore County, Towson, Maryland
M.A. required within ten years for junior and senior high school teachers

St. Louis, Missouri
M.A. required within two years for senior high school teachers

New Rochelle, New York
M.A. required within three years for junior and senior high school teachers

Rochester, New York
M.A. required for permanent certification in junior and senior high school

Conclusion:

What little empirical evidence that exists favors the Masters Degree as being related to improved teaching. Common practice in comparable districts shows the M.A. Degree to be a requirement at some point in the salary schedule, but none as low as the B.A. plus 42 units contemplated by Burbank. Reports from teacher training institutions indicate that the M.A. Degree may be attained with less than forty-two units beyond the M.A. with no discrimination arising as to whether the person already held an elementary or secondary credential. (Some expert opinion held that the M.A. Degree requirements for an elementary teacher were not realistic in relation to her needs.) There was no evidence, and only a little opinion, that the "screening" for M.A. candidates resulted in better teachers, since there is great variation in the amount of "screening" by the colleges and universities. "Expert Opinion" slightly opposed the requirement of the Masters Degree in the salary schedule, and those taking this position recommend a "guided" program of teacher development.